

CLAIMS

What is claimed is:

1. An image processing evaluation method, comprising:
 - forecasting a number of image processing parameters of an image processing operation based upon at least one image processing setting;
 - displaying the image processing parameters on a display device;
 - altering the at least one image processing setting based upon a user setting input;
 - re-forecasting the number of image processing parameters based upon the at least one image processing setting altered by the user setting input; and
 - performing a preoperative task based upon a user input in response to the display of the image processing parameters.
2. The image processing evaluation method of claim 1, further comprising associating at least one threshold with at least one of the image processing parameters, thereby providing a performance benchmark with which a value for the at least one of the image processing parameters may be compared.
3. The image processing evaluation method of claim 2, wherein the associating of the at least one threshold with the at least one of the image processing parameters further comprises automatically determining the at least one threshold.
4. The image processing evaluation method of claim 1, wherein the performing of the preoperative task based upon the user input further comprises initiating the image processing operation.

5. The image processing evaluation method of claim 1, wherein the performing of the preoperative task based upon the user input further comprises canceling the image processing operation.

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6. The image processing evaluation method of claim 1, wherein the performing of the preoperative task based upon the user input further comprises automatically determining an optimum configuration for the at least one image processing setting to perform the image processing operation.

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7. The image processing evaluation method of claim 6, wherein the automatically determining of the optimum configuration for the at least one image processing setting to perform the image processing operation further comprises determining whether at least one of the image processing parameters exceeds at least one threshold associated therewith.

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8. The image processing evaluation method of claim 1, wherein the forecasting of the number of image processing parameters of the image processing operation based upon the at least one image processing setting further comprises forecasting the image processing parameter based upon the at least one image processing setting that includes a number of scan settings.

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9. The image processing evaluation method of claim 1, wherein the forecasting of a number of image processing parameters of an image processing operation based upon at least one image processing setting further comprises determining an execution time of the image processing operation based on the at least one image processing setting, wherein the image processing operation is a scan operation and the at least one image processing setting includes at least one scan setting.

10. The image processing evaluation method of claim 9, wherein the forecasting of the number of image processing parameters of the image processing operation based upon the at least one image processing setting further comprises comparing the execution time with at least one execution time threshold to obtain a measure of the performance of the image processing operation.

11. The image processing evaluation method of claim 1, further comprising displaying an operation evaluation message on the display device indicating an expected measure of performance of the image processing operation.

12. An image processing evaluation program embodied in a computer readable medium, comprising:

code that evaluates an effectiveness of an anticipated execution of the image processing operation in a computer system;

code that presents a number of image processing parameters to a user, the image processing parameters indicating the effectiveness of the anticipated execution of the image processing operation; and

code that provides for an alteration of a number of image processing settings that correspondingly alters the effectiveness of the anticipated execution of the image processing operation.

13. The image processing evaluation program embodied in the computer readable medium of claim 12, further comprising code that provides for an execution of the image processing operation based upon a user input.

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14. The image processing evaluation program embodied in the computer readable medium of claim 12, further comprising code that prevents the execution of the image processing operation when the computer system is incapable of performing the image processing operation.

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15. The image processing evaluation program embodied in the computer readable medium of claim 12, further comprising code that provides for at least one threshold associated with at least one of the image processing parameters, thereby providing a performance benchmark with which a value for the at least one of the image processing parameters may be compared.

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16. The image processing evaluation program embodied in the computer readable medium of claim 15, wherein the code that provides for at least one threshold associated with the at least one of the image processing parameters further comprises code that automatically determines the at least one threshold.

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17. The image processing evaluation program embodied in the computer readable medium of claim 12, further comprising code that automatically optimizes the image processing settings.

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18. The image processing evaluation program embodied in the computer readable medium of claim 17, further comprising code that withholds at least one of the image processing settings from an automated optimization operation.

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19. The image processing evaluation program embodied in the computer readable medium of claim 12, wherein the code that evaluates the effectiveness of the anticipated execution of the image processing operation in the computer system further comprises code that estimates an amount of time for a full execution
10 of the image processing operation.

20. The image processing evaluation program embodied in the computer readable medium of claim 12, wherein the code that evaluates the effectiveness of
15 the anticipated execution of the image processing operation in the computer system further comprises code that estimates a minimum amount of at least one type of memory that is necessary to perform the image processing operation.

20 21. The image processing evaluation program embodied in the computer readable medium of claim 12, wherein the image processing operation is a scan operation.

25 22. The image processing evaluation program embodied in the computer readable medium of claim 21, wherein at least one of the image processing settings is selected from the group consisting of a scan resolution of the scan operation, a color depth of the scan operation, and a page size of the scan operation.

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23. An image processing evaluation system, comprising:
a processor circuit having a processor and a memory;
an image processing evaluator stored in the memory and executable
by the processor, the image processing evaluator comprising:

5 logic that evaluates an effectiveness of an anticipated
execution of the image processing operation in a computer system;
logic that presents a number of image processing parameters
to a user, the image processing parameters indicating the effectiveness of
the anticipated execution of the image processing operation; and
10 logic that provides for an alteration of a number of image
processing settings that correspondingly alters the effectiveness of the
anticipated execution of the image processing operation.

15 24. The image processing evaluation system of claim 23, wherein the
image processing evaluator further comprises logic that provides for an execution
of the image processing operation based upon a user input.

20 25. The image processing evaluation system of claim 23, wherein the
image processing evaluator further comprises logic that provides for at least one
threshold associated with at least one of the image processing parameters, thereby
providing a performance benchmark with which a value for the at least one of the
image processing parameters may be compared.

25 26. The image processing evaluation system of claim 25, wherein the
logic that provides for the at least one threshold associated with the at least one of
the image processing parameters further comprises logic that automatically
30 determines the at least one threshold.

27. The image processing evaluation system of claim 23, wherein the image processing evaluator further comprises logic that prevents the execution of the image processing operation when the computer system is incapable of performing the image processing operation.

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28. The image processing evaluation system of claim 23, wherein the image processing evaluator further comprises logic that automatically optimizes the image processing settings.

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29. The image processing evaluation system of claim 28, wherein the image processing evaluator further comprises logic that withholds at least one of the image processing settings from an automated optimization operation.

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30. The image processing evaluation system of claim 23, wherein the logic that evaluates the effectiveness of the anticipated execution of the image processing operation in the computer system further comprises logic that estimates an amount of time for a full execution of the image processing operation.

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31. The image processing evaluation system of claim 23, wherein the logic that evaluates the effectiveness of the anticipated execution of the image processing operation in the computer system further comprises logic that estimates a minimum amount of at least one type of memory that is necessary to perform the image processing operation.

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32. The image processing evaluation system of claim 23, wherein the image processing operation is a scan operation.

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33. The image processing evaluation system of claim 32, wherein at least one of the image processing settings is selected from the group consisting of a scan resolution of the scan operation, a color depth of the scan operation, and a page size of the scan operation.

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34. A system for image processing operation evaluation, comprising:
means for evaluating an effectiveness of an anticipated execution of
an image processing operation in a computer system;

10 means for presenting a number of image processing parameters to a user, the image processing parameters indicating the effectiveness of the anticipated execution of the image processing operation; and

means for altering of a number of image processing settings that correspondingly alters the effectiveness of the anticipated execution of the image
15 processing operation.

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35. An image processing evaluation program embodied in a computer readable medium, comprising:

code that evaluates an effectiveness of an anticipated execution of the image processing operation in a computer system by estimating an amount of time for a full execution of the image processing operation and by estimating a minimum amount of at least one type of memory that is necessary to perform the image processing operation;

code that presents a number of image processing parameters to a user, the image processing parameters indicating the effectiveness of the anticipated execution of the image processing operation;

code that prevents the execution of the image processing operation when the computer system is incapable of performing the image processing operation; and

code that provides for an execution of the image processing operation based upon a user input.

36. The image processing evaluation program embodied in the computer readable medium of claim 35, further comprising code that facilitates a manual alteration of a number of image processing settings that correspondingly alters the effectiveness of the anticipated execution of the image processing operation.

37. The image processing evaluation program embodied in the computer readable medium of claim 36, further comprising code that automatically optimizes the image processing settings.

38. The image processing evaluation program embodied in the computer readable medium of claim 37, wherein the image processing operation is a scan operation.

39. The image processing evaluation program embodied in the computer readable medium of claim 37, wherein at least one of the image processing settings is selected from the group consisting of a scan resolution of the scan operation, a color depth of the scan operation, and a page size of the scan operation.

40. An image processing evaluation method, comprising:
forecasting a number of image processing parameters of an image processing operation based upon at least one image processing setting, the image processing parameters including an estimate of an execution time of the image processing operation and an estimate of a minimum amount of at least one type of memory necessary to perform the image processing operation;
displaying the image processing parameters on a display device; and
performing a preoperative task based upon a user input in response to the display of the image processing parameters.

41. The image processing evaluation method of claim 40, wherein the step of performing the preoperative task based upon the user input in response to the display of the image processing parameters further comprises initiating the image processing operation.

42. The image processing evaluation method of claim 40, wherein the step of performing the preoperative task based upon the user input in response to the display of the image processing parameters further comprises canceling the image processing operation.

43. The image processing evaluation method of claim 40, wherein the step of performing the preoperative task based upon the user input in response to the display of the image processing parameters further comprises:

- 5 altering the at least one image processing setting based upon a user setting input; and
- re-forecasting the number of image processing parameters based upon the at least one image processing setting altered by the user setting input.

- 10 44. The image processing evaluation method of claim 40, wherein the step of performing the preoperative task based upon the user input in response to the display of the image processing parameters further comprises automatically determining an optimum configuration for the at least one image processing setting to perform the image processing operation.

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